

P r e f a c e

This publication is the doctrinal guide for NBC reconnaissance. It provides guidance on the planning and execution of NBC reconnaissance missions and chemical/biological (CB) sampling operations. This manual applies to any unit that has the primary or implied mission of performing NBC reconnaissance.

NBC recon is the active contamination avoidance measure that provides commanders with information on NBC hazards in the area of operations as a component of battlefield management. With knowledge of where NBC contamination hazards are and, just as important, where they are not, commanders can make better decisions. Commanders may modify their plans or protective postures with the information from NBC recon.

NBC recon provides early warning, determines the concentration and type of agent, and locates the boundaries of contamination. The information derived from the intelligence preparation of the battlefield (IPB) and the conduct of effective NBC recon operations are key factors for battlefield management. The avoidance of NBC contamination facilitates freedom of movement and maneuver for our forces. Contamination avoidance procedures are discussed in greater detail in FM 3-3 and FM 3-3-1.

NBC recon performs five critical tasks on the battlefield— detect, identify, mark, report, and sample. Early detection of NBC hazards is required for timely warning of units and personnel in affected areas. Detection of contamination is the cornerstone of contamination avoidance. Rapid identification is needed to adequately protect soldiers against NBC hazards. Identification dictates preventive measures and treatment of casualties. Contaminated areas are marked to allow friendly forces to avoid them. Data concerning contamination is useless unless it reaches decision makers. Timely, accurate reporting is essential for decision making and hazard warning. Samples are taken to aid in the identification of

unknown agents. Sampling and subsequent laboratory analysis are the primary means of identifying biological agents.

This manual also provides the principles and techniques used by NBC recon units. It defines the capabilities and limitations of these organizations.

Commanders and staff officers at all echelons will find guidance on the employment of NBC recon units. These units are located in chemical companies assigned to armored and light cavalry regiments and heavy divisions. NBC recon companies are assigned to corps and theater armies. The doctrine contained in this manual applies for commanders, staffs (chemical officers/S2s/G2s/S3s/G3s), trainers, and unit leaders responsible for NBC recon units and NBC recon operations.

The employment of M93 NBC reconnaissance system (NBCRS) (Fox)-equipped units is integrated throughout the manual. The M93 NBCRS is designed to improve the capability and increase efficiency for conducting NBC recon operations. The M93 NBCRS provides a faster response time, quicker detection, and identification rates, and quicker marking capability, while using basically the same NBC recon tactics, techniques, and procedures.

Although this manual does not implement any particular international agreement, material presented herein complies with related international agreements. A list of related international agreements and other references can be found in the references section.

Unless otherwise stated, whenever the masculine gender is used, both men and women are included.

The proponent for this manual is HQ, TRADOC. Submit changes for improving this publication on DA Form 2028 (Recommended Changes to Publications and Blank Forms) and forward it to Commandant, US Army Chemical School, ATTN: ATZN-CM-FNB, Fort McClellan, AL 36205-5020.

I n t r o d u c t i o n

On the modern battlefield, victory will come to those leaders who employ their assets effectively and who thoroughly understand the capabilities and vulnerabilities of the enemy. This manual provides leaders the information to employ NBC recon units and to conduct NBC recon.

The use of weapons of mass destruction can radically alter the flow of battle, restrict terrain, limit mobility, degrade military efficiency, and even shift the balance of

power, placing a superior force at risk. NBC reconnaissance is a crucial element of combat operations that enables us to limit risk and avoid NBC contamination hazards. The degree of success in conducting NBC reconnaissance operations depends on three critical components: integrated planning, effective employment, and operational proficiency. This manual addresses these three areas.

N a t u r e o f t h e p r o b l e m

The challenges posed for military operations conducted under NBC conditions will be many and varied. There may be times when our forces will have to operate in complete individual or collective protection equipment. A significant problem will surface once the initial shock of first use of weapons of mass destruction has worn off. Areas targeted with these weapons may remain hazardous for days, even

weeks, after the attack. We will know some of these hazardous areas with certainty and clarity. There will be other hazardous areas we may not know exist. If we must operate over this terrain, then we will need to know with certainty which areas and routes are passable and habitable, as well as those that are not.

L e a d e r s h i p

Unit leaders must also seek every opportunity to influence the conditions under which the enemy is engaged. Success depends on effectively orchestrating the battlefield operating systems to execute operations. The integration of all assets that influence the battle is essential to defeating an enemy and preserving combat potential. The enemy's use of weapons of mass destruction may be the key factor for influencing the outcome of any battle. Leaders must not only be knowledgeable of the effects from weapons of mass destruction, but also the enemy's capabilities and intentions for these weapons. The NBC recon capability organic to the chemical companies in the heavy divisions, armored cavalry regiments, and the chemical company (recon) at corps and above is an invaluable asset available to the commander. NBC recon provides valuable and timely information that will aid the commander in contamination avoidance and mission accomplishment.

As with any other combat support asset, NBC recon units must be effectively employed to achieve optimum results. Commanders must know capabilities and limitations of the units. Staff planners, including the NBC battle staff must fully integrate NBC recon into the tactical planning process. Warfighting exercises must incorporate these capabilities to enhance employment proficiency. Field training exercises will reinforce tactical employment skills--support the maneuver plan, battle command, battlefield management, and so forth. Mission assignment to the NBC recon unit or element should be on "What?" not "How?" of NBC recon. Basic provisions for employment are—

- Integrate into planning process and develop detailed plans.
- Rehearse, rehearse, rehearse.
- Never place in reserve.
- Always have follow-on missions.
- Never fragment capability.

N B C T e c h n o l o g y

The technology to produce and deliver chemical/biological (CB) weapons is proliferating at an alarming pace. Nations in some of the world's most unstable regions perceive CB weapons as an effective deterrent against other more technically advanced nations. Some leaders view the mere possession of these weapons

as an international military status symbol. Further, the technology used in CB weapons is readily available for the determined buyer.

Arguments that certain types of US forces will not encounter a CB or even a radiological threat are no longer valid. These weapons are possessed by potential hostile

nations where the United States maintains a strategic interest. These same nations either have or are acquiring ballistic missiles thus extending their targeting capability.

Even at the lowest end of the operational continuum (peace time competition), our Army has a need to assess, contain, and limit NBC hazards. Some corporations find the cheap labor pool and relaxed safety and environmental

restrictions in developing nations to be attractive options for industrial and chemical production facilities. These facilities, either through accident or sabotage, may release chemical hazards that equal those found in open chemical warfare. Accidents or sabotage in nations that possess a nuclear industry can create radiological hazards like those of the 1986 Chernobyl reactor fire.